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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,893	11/05/2001	Wenhua Lin	LIGHT2180	3380

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7590 06/01/2004

EXAMINER

DOAN, JENNIFER

ART UNIT PAPER NUMBER

2874

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicant(s)

09/991,893

Applicant(s)

LIN, WENHUA

Examiner

Jennifer Doan

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-11, 13, 14 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 2-4, 12 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0304</u> . | 6) <input type="checkbox"/> Other: ____  |

### **DETAILED ACTION**

Applicant's communication filed on 03/12/2004 has been carefully studied by the Examiner. The arguments advanced therein, considered together with the amendment made to the claims, are not persuasive. In view of further scrutiny of all pending claims with respect to the prior art, it has been discovered that the Aksyuk patent is still pertinent to claims. A rejection based on Aksyuk patent is thus applied. This action is made final.

### ***Information Disclosure Statement***

1. The prior art documents submitted by applicant in the Information Disclosure Statement filed on 03/12/2004, have all been considered and made of record (note the attached copy of form PTO-1449).

### ***Specification***

2. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an

application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 5-11, 13 and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Aksyuk et al. (U.S. Patent 6,636,657).

Regarding claims 1, 10, 17, 19 and 20, Aksyuk et al. disclose (in figure 4) a method and an apparatus of an equalizer comprising a light distributor (401) configured to distribute light signals received through an inlet side across an outlet side, each of the light signals being associated with a different wavelength; optics configured to cause different light signals to separate the light signals travel through the light distributor (column 4, lines 58-60); and a plurality of attenuators (403) configured to attenuate the light signals in a region of the light distributor (401) where the light signals are separated from one another.

Regarding claims 5 and 6, Aksyuk et al. disclose (in figure 4) an equalizer wherein the outlet side includes a plurality of outlet ports, which are in optical communication with an array waveguide grating, and the light distributor (406) distributes the light signals across a plurality of the outlet ports (column 4, lines 46-47).

Regarding claim 7, Aksyuk et al. disclose (in figure 4) an equalizer wherein the array waveguide grating is in optical communication with an outlet light distribution component (406) to direct light signals received from the array waveguide grating to a port of an output waveguide (column 3, lines 29-32).

Regarding claim 8, Aksyuk et al. disclose an equalizer wherein the optics include an array waveguide grating (column 4, lines 58-60).

Regarding claims 9 and 18, Aksyuk et al. disclose an equalizer wherein the optics are in optical communication with an input light distribution component (401) to distribute light signals received from an input waveguide across ports of the array waveguide grating as shown in figures 3 and 4.

Regarding claim 11, Aksyuk et al. disclose (in figure 1) an equalizer wherein the attenuators (104) include a plurality of electrical contacts positioned on the same side of the light distributor (101) (column 3, lines 47-56).

Regarding claim 13, Aksyuk et al. disclose an equalizer wherein the light distributor is defined in a light-transmitting medium positioned over a base (column 2, lines 11-17 and column 3, lines 29-46).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aksyuk et al. (as cited above).

Aksyuk et al. disclose an equalizer with all the limitations set forth in the claims as discussed above, except for the base having a pocket and the light distributor being positioned over the pocket as recited in claim 14. However, the base having a pocket is considered to be obvious, since making the base with the pocket is one of many modifications to support the optical device. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Aksyuk device with a base having a pocket. Doing so would be desirable to obtain a strong support for an optical device.

Aksyuk et al. disclose an equalizer with all the limitations set forth in the claims as discussed above, except the functional light distributor includes grooves between adjacent attenuators as recited in claim 16. However, the functional light distributor having grooves is also considered to be obvious, since making the grooves is one of many modifications to hold and support the optical device. Such an element would advantageously provide for holding and supporting the optical device. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Aksyuk device with a base having a pocket. Doing so would be desirable to obtain a strong support for an optical device.

#### ***Allowable Subject Matter***

7. Claims 2-4, 12 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 2-4, 12 and 15 are objected as stated in the prior office action.

Claims 3 and 4 are also objected in view of their dependence on claim 2.

### ***Response to Arguments***

8. In the applicant's response to the rejection of claims 1, 5-11 and 13 are rejected under 35 U.S.C. 102, it is argued that Aksyuk et al. reference does not disclose a light distributor where light signals are both separated and attenuated (page 5, paragraph 3). The examiner respectfully disagrees, and submits that the reference fully reads on the claims as currently written.

Aksyuk et al. explicitly disclose (in figure 4) light signals to separate as the light signals travel through a light distributor (401) and attenuators (403) configured to attenuate the light signals in a region of the light distributor where the light signals are separated from one another (as clearly shown in figure 4 and column 4, lines 45-60).

In the applicant's response to the rejection of claims 17-19 are rejected under 35 U.S.C. 102, it is argued that Aksyuk et al. reference does not disclose at least one attenuator configured to attenuate a plurality of the light signals (page 5, paragraph 4). The examiner also respectfully disagrees since Aksyuk et al. disclose the attenuators may be individual devices or may be formed together as one device to attenuate the light signals. (column 2, lines 65-67 and column 6, lines 9-13). Therefore, Aksyuk et al. reference fully reads on limitations of the claimed invention.

**Conclusion**

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00 am to 3:30 pm, second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

*Jennifer Doan*

JD

May 20, 2004

*Phan T. H. Palmer*  
**PHAN T. H. PALMER**  
**PRIMARY EXAMINER**